

Policy
Development

Core Fun

Prevention/
Promotion

Assurance

Assessment

Chapter 2

The benefits of public health: A vision for Washington State

The National Academy of Sciences' Institute of Medicine concluded in a 1982 report that only 10% of premature deaths in the U.S. could be avoided with better access to health care, while 70% could be prevented by reducing environmental threats and risky individual behaviors. The remaining 20% are due to inherited conditions.

Think about it -- even if we had the very best medical care system possible, a system in which we already spend \$18 billion annually in Washington State, we would prevent only one of every ten premature deaths that are possible to prevent. But if our public health system worked as well as possible, a system currently spending only \$330 million annually, as many as seven out of every ten premature deaths might be prevented.

The mission of the public health system is to protect and improve the health of Washington residents by:

- *Helping individuals, families, and communities to make informed health choices;*
- *Assuring access to quality prevention and illness care;*
- *Protecting people from threats to health; and*
- *Advocating sound, cost-effective health policies.*

The Public Health Improvement Plan links this mission with the overall goals of Washington State health system reform.

The Washington Health Services Act of 1993 seeks to remove access barriers and control costs primarily through a mandated timetable for universal health insurance coverage and a regulated marketplace of managed health care plans in which patients, providers, and insurers all share some financial risk. The act created the Washington Health Services Commission to ensure that these provisions are implemented successfully. At the same time, the act recognizes that a strong public health system is essential to achieving the goals of health reform and protecting the economic viability of the state. The population-based services provided by state and local health departments are deemed cost-effective and critical for the long-term containment of health care costs. Taken together, these provisions of the law make Washington's health system reform plan the most comprehensive in the nation.

Health system reform in Washington

In addition to requiring development of the Public Health Improvement Plan, the Health Services Act of 1993 reforms Washington's health care and health insurance systems by:

- Requiring all state residents, businesses, employees, and government to participate equitably in paying for health services in a way that encourages appropriate use of services.
- Expanding publicly funded health insurance programs to cover people with low incomes and those who are unemployed.
- Creating the Washington Health Services Commission to oversee reform and the health system, including developing the "uniform benefits package" — the minimum benefits all state residents will have by 1999.
- Promoting fair competition among certified health plans — the only insurance plans that will be allowed to operate in the state. They must offer at least the uniform benefits package, for not more than a maximum price set by the commission, to any state resident, regardless of employment, income, or health status.
- Promoting efficiency and cost control by requiring that health plan premiums be community rated, limiting the growth of premiums, encouraging certified health plans to effectively manage care and money, and requiring modest co-payments when people seek certain health care services.

The act also defines a "uniform set of health services" composed of the uniform benefits package, core public health functions as defined in the Public Health Improvement Plan, and health system support.

As the health care system becomes more equitable and efficient, an important question will remain: who will be responsible for overseeing community health and helping citizens and communities respond to threats to health such as waterborne contaminants, violence, adolescent tobacco use, or infectious diseases?

The Health Services Act recognizes that neither universal insurance coverage nor managed care can adequately answer this question. Under reform, certified health plans and health care providers will be encouraged to emphasize prevention and health promotion, but the services they provide (primarily diagnosis, treatment, and prevention aimed at individuals) will remain only one of many factors that determine individual, family, and community health. Poor nutrition, inadequate housing, poverty, unstable family environments, unhealthy life-styles, community violence, and environmental pollutants -- all of which contribute to poor health -- will not be mitigated by universal insurance coverage and managed competition. Rather, the act recognizes that the third goal of reform, good health, requires a well-functioning public health system.

Improving health: Public health in the lead

The connection between public health programs and better health is well established. Since 1900, the average life expectancy of Americans has gone up from 45 to 75 years. Public health improvements in sanitation, the control of diseases through immunizations, and other activities are responsible for 25 of the 30 additional years that Americans can now expect to live. In addition, population-based public health programs of the 1970s contributed greatly to recent improvements in reduced tobacco use, blood pressure control, diet, use of seat belts, and injury control, which in turn have contributed to declines of more than 50% in deaths due to stroke, 40% in deaths due to heart disease, and 25% in overall death rates for children.¹

Recognizing the cost-effectiveness of prevention, the legislature in 1993 appropriated \$10 million to address critical local public health problems. Termed "Urgent Needs" funds, this \$10 million appropriation represented a type of down payment on an enhanced investment in public health -- a commitment to build capacity in local communities. The Urgent Needs funds were provided to public health using a markedly different approach: instead of being tied to specific categories of services or public health problems, these funds were distributed to local health departments and districts on a per capita basis to use in whatever manner local health officials believed best addressed the unmet needs of their community. Today, 180 special health promotion and protection projects are underway in communities across the state as a result.

Local health officials have responded enthusiastically to the noncategorical funding. During the first year of the 1993-1995 biennium, over \$4.6 million of the funds were budgeted for use, with nearly half going towards environmental health protection and infectious disease prevention. Thirteen local health jurisdictions have started community health assessment activities with Urgent Needs funds. The 1995-1997 state budget request calls for a continuation of \$10 million in Urgent Needs funds. See Appendix D for more information on the projects made possible by these funds.

E. coli: Inadequate prevention requires strong public health response

In 1993, the State Department of Health received reports of unusually high numbers of children hospitalized with hemolytic uremic syndrome (HUS) and an increase in emergency visits for bloody diarrhea. Health officials suspected an outbreak and immediately began an investigation to find the source of infection. Within a week of notification, public health laboratories had identified *E. coli* 0157:H7 as the cause; state and federal epidemiologists had traced the source to contaminated hamburgers from a chain of fast-food restaurants; and public health officials had pulled 250,000 contaminated hamburgers from the chain to prevent further infection. Ultimately, 602 people in Washington State were ill: 144 people were hospitalized and three children died.

The response of the official public health system was swift and strong. Effective data gathering, diagnostic testing, and prompt action kept to a minimum the number of people who became ill and died.

However, this response was necessary because preventive actions to keep restaurant food safe failed. Better and more frequent training of cooks and food handlers, and better communication between public health agencies and restaurants, as well as more effective food inspections by the federal government, could have prevented this outbreak. The absence of effective prevention in this case resulted in unnecessary suffering of the victims and their families. In addition, the economic costs were large: millions of dollars were spent on emergency and treatment work performed by public health and medical care professionals; restaurants were forced to close, and expensive lawsuits resulted.

The Urgent Needs funds are allowing public health to begin to address some of the state's most pressing public health problems. The recommendations presented in this report, if followed, will give communities even stronger tools to prevent, reduce, or avoid the numerous health problems discussed in Chapter 1. These tools are called the core functions of public health and are defined by the capacity standards presented in Chapter 3. If public health agencies successfully perform the core functions, the health of citizens and communities will improve. Communities with well-functioning public health agencies will more likely attain the levels of good health defined by the Outcome Standards presented in this report (see Appendix A).

Controlling costs: Public health is a good buy

We have a choice of how to deal with health problems. We can sit back and wait until people become ill, injured, or disabled, and then treat them in our very expensive health care system. Or we can find the causes of these problems and work to prevent them from ever happening. Which choice we make will affect how much money we must spend, and what we spend it on. Many public health prevention programs cost less than the treatment services needed if prevention is absent:

- *The cost of water fluoridation for an individual's entire lifetime (about \$38) is about the same as the cost of treating just one tooth with a cavity.*
- *Each dollar spent on helping a pregnant woman stop smoking saves about \$6 in intensive hospital costs and long term care for low birth weight babies.*
- *Each year, public health outreach and vaccines have prevented nearly 7 million cases of measles, mumps, and rubella, saving \$14 in medical care costs for every dollar spent on immunizing children.*
- *Providing consumers with information about how to stay healthy and manage their own care can lower rates of service use by 7-17%.*

The choice between prevention and treatment of health problems -- and the costs and benefits involved -- is much like other choices we can make in our lives. For example, we can take our car in for regular tune-ups and oil changes, the costs of which may be in tens or hundreds of dollars. Or we can "save" these costs and run the car on old spark plugs and dirty oil, risking engine damage that might cost thousands of dollars to repair.

Assuring access and promoting health: The public health-medical care partnership

The reformed health system envisioned for Washington State will both attend to individuals' health care needs and help create the conditions in which families and communities can remain healthy and productive. All state residents will be insured for a comprehensive set of benefits and will receive most of their personal and family care from practitioners through certified health plans. Local and state public health agencies will help keep the public healthy by monitoring health status and threats to health, helping communities set priorities and strategies for action, and assuring these strategies are carried out successfully by working with civic groups, nonprofit organizations, other government agencies, businesses, and other parts of the community.

A partnership in action

There are many potential partners for public health, both in the public and private sector, as it goes about increasing capacity to improve the health of communities. A good example comes from eastern King County, where a partnership has formed to evaluate the health needs of the King County Public Hospital District No. 2. The Community Advisory Health Status Task Force includes the Evergreen Hospital Medical Center, the Overlake Hospital Medical Center, the Seattle-King County Department of Public Health, the Washington State Hospital Association and the Northshore School District.

The mission of the Task Force involves evaluation of health status of the community, identifying areas where interventions are needed, and creating community and inter-agency partnerships to facilitate the development of new interventions. The Evergreen Hospital's Community Health Status Department is in a coordinating role as the Task Force reviews health status information. Upon that review, they will be setting priorities for broad-based, community-partnered interventions. The assessment expertise of the Seattle-King County Department of Public Health combined with the health status information available from Task Force members, forms the basis for a comprehensive assessment of the health of the citizens in eastern King County.

To succeed at both preventing and treating health problems, the public health and medical care systems must work closely together. In many cases, health care providers can give early warning of possible community-wide problems by alerting public health officials to unexplained trends in illness or symptoms that may be due, for example, to environmental hazards. Public health can then take action itself, or mobilize other organizations in the community, to reduce the hazard early on. Likewise, public health agencies can alert health care providers if they discover or suspect that a population is being exposed to a health threat. The health care providers can then help to find, evaluate, and, if necessary, treat people at risk.

This partnership begins in communities. The local public health jurisdiction can assist certified health plans by: (1) identifying trends in diseases and injuries; (2) evaluating the effects of health plan prevention programs on the community; and (3) providing prevention-related technical assistance or direct services to health plan enrollees. Certified health plans will assist the local public health agency by collaborating in, and perhaps funding, community-wide prevention efforts, and providing data that will allow the public health agency to monitor the effects of these efforts on health status.

The partnership extends to the state level, as the Health Services Act promotes the shared responsibility among the Washington Health Services Commission, the Health Care Authority, the Department of Health, the State Board of Health, and other health-related state agencies for improving the health of state residents. The commission is responsible for focusing the attention of certified health plans on improving health status, not just on providing health care services. The Health Care Authority will expand access to needed health care services through publicly sponsored health plans and programs. The department and board, in carrying out their duties to collect and analyze health data and set statewide priorities, will inform the commission of health problems that certified health plans should address.

The process of prevention: How core function activities promote better health

We understand fairly well how doctors and hospitals successfully treat an illness or injury. Most of us have been to the doctor, and understand and accept that if we take the drug prescribed, we will feel better, or if we do the exercise described by the physical therapist, our sore shoulder will hurt less often. What we don't often think about is the years of effort that preceded our visit to the doctor and the successful treatment: the research studies that identified the virus or bacterium that causes the disease, the tests of different drugs to see which is most effective, the information provided to practitioners so they can recognize the symptoms for which the drug will be effective.

*We also understand the benefits of successful public health prevention (even if we don't realize that public health is responsible): water from our faucets that doesn't make us sick, babies born healthy, fewer car accident deaths, restaurant food free of *E. coli*. But much of the work that leads to this successful prevention is invisible to us.*

TB: Public and private health coordination needed

A 60-year-old foreign born woman became ill with chronic shortness of breath and chest pain, and after a brief hospitalization, was diagnosed with congestive heart failure. She did not get any relief from the recommended therapies and went to the emergency room several times. One month after diagnosis, she was taken by ambulance to a Spokane hospital, where it was determined that she had active, pulmonary tuberculosis (TB). She was discharged without medication for her TB and the local health department was not informed.

Three days later, a family member brought a prescription to the Okanogan Health District after having been referred by a local pharmacist. The public health nurse could identify no prior contact, and a telephone call to the prescribing physician confirmed the diagnosis. The physician, who was not familiar with the role of public health or the current recommendations for treatment of tuberculosis, had assumed someone else would report the case. The patient had received no instruction in her native language about treatment and how to prevent spread to others.

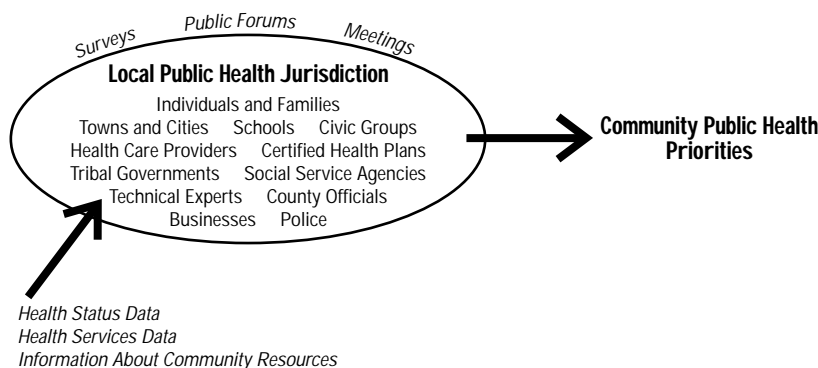
Public health nurses made a home visit the next morning and began contact tracing. This resulted in 57 household contacts being identified, including four pregnant women and 19 children. Thirty-nine individuals were started on preventive treatment. Of the 35 health workers exposed to the patient, one became positive for TB and was placed on preventive treatment. The local medical community, through education by public health nurses, developed a heightened awareness about tuberculosis and coordination improved for testing and treatment with the local health district.

As the public health system is strengthened through the PHIP process, a lot will be happening behind the scenes, invisible work leading directly to better health -- in the same way that medical research and testing precede our doctor visits and result in successful medical treatment. This is the work of the core functions of public health -- community health assessment, health policy development, and assurance that policies are being carried out.

Community health assessment

In every community of the state, the local public health jurisdiction will convene a "community assessment process" on a regular basis, perhaps every two years. This process will bring together all parts of the community to discuss what today's health problems are and what tomorrow's problems may be. The public health agency will bring to the process data it receives from a statewide data collection system, as well as data collected by the agency itself and others in the community (for example, police departments, businesses, health plans, civic groups, schools). These data will include rates of disease and injury, use of health care services, air and water quality, immunization rates, the results of health status surveys, and other kinds of health related information. Information about the community's resources will also be available, such as the number of health professionals, health promotion and prevention programs, worker safety classes, health education curricula, and business initiatives. For some health threats, the State Department of Health may provide technical assistance to the community. The result of the community assessment process will be a list of priority health problems and threats on which the community wants to focus its efforts and resources.

Community health assessment process



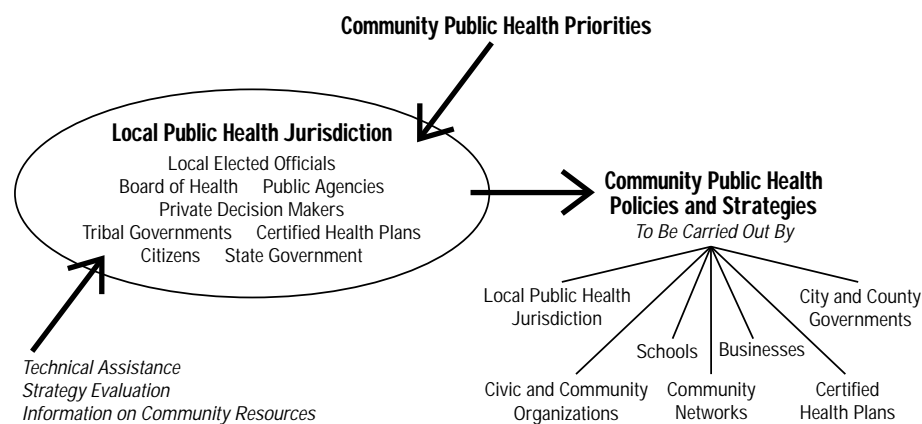
Too Little Too Late

Samish Bay, a shellfish growing area in Skagit county, was partially closed to commercial growing after a number of people became ill from eating contaminated oysters. The problem was caused by coliform contamination in the surrounding waters. Months earlier the suspected source of the contamination, failing on-site sewage systems, had been identified, but there was no money available to carry out the needed repairs. After the outbreak of gastroenteritis and closure of commercial harvesting, the community mobilized to resolve the problem. The Small Towns Economic Program (STEP), the New York-based Rennselaerville Institute, and Washington State Departments of Ecology and Health are collaborating to restore and improve water quality in the surrounding watershed. Although the resulting collaboration is working successfully and additional illness has been thwarted, the outbreak of disease and the economic emergency in the community could have been prevented. This is a classic example of too little money and attention, paid too late.

Health policy development

Like community assessment, the “policy development process” -- deciding what to do about the priority public health problems -- will involve many members of the community. The local public health jurisdiction will work with elected officials, community groups, community networks, and private sector leaders to determine what strategies will best reduce the problems or threats, and identify who is best able to carry out those strategies. The local public health jurisdiction will also define strategies for those issues that are its direct responsibility, such as environmental health. Public health officials will bring to this community decision-making process an understanding of the underlying causes of the priority health problems and of the potential effects of specific interventions, based on local, state, and national evaluations.

Policy development process



Assurance that policies are carried out

The prevention strategies that are most visible to us -- the successful campaign to reduce tobacco use, the law changes and community education programs to reduce child head injuries from bicycle crashes -- are based on the less visible community assessment and policy development processes.

What does the public health system do to assure that these prevention efforts are successful? For some health problems, state and local public health agencies have the power and the duty to take direct action.

Many health threats facing society today -- such as violence, homelessness, and air pollution -- are too complex for any one organization or agency to address successfully; the community as a whole must be involved. In such cases, the public health jurisdiction has a critical role to play in the community by:

- Defining the threat or problem
- Helping community leaders and citizens understand its importance.
- Building community consensus about the best strategies to use.
- Supporting the organizations, agencies, businesses, or individuals best able to carry out the strategies.
- Monitoring the threat or problem, evaluating the effects of interventions, and bringing this information back to the community and decision makers.

This chapter has set forth an overall vision for the public health system of Washington State. The next chapter describes in detail the responsibilities of public health and the resources needed to meet them.

¹ *Health Care Reform and Public Health: A Paper on Population-based Core functions*, Core Functions Project, U.S. Public Health Service, 1993, p.2.